

APPARATUS AND METHOD FOR EXPRESSING FLUID MATERIALS

ABSTRACT

5 Apparatus for selectively expressing one or more selected fluid materials out of a fluid container, wherein each of the selected fluid materials has a selected density and wherein the fluid container comprises a round enclosure having a flexible wall and an exit port sealably communicating with the fluid container for enabling the selected fluid materials contained therein to be expressed out of the fluid container through the exit port, the apparatus comprising a centrifuge rotor having a round centrifuge
10 chamber of selected volume, the centrifuge rotor being controllably rotatable around a central axis by a motor mechanism; a round expandable enclosure disposed within the centrifuge chamber having a rotation axis coincident with the central rotation axis and a flexible wall, the fluid container having a rotation axis and being coaxially receivable within the centrifuge chamber, the expandable enclosure being sealably connected to a source of an expresser fluid which has a density selected to be greater than
15 the density of each of the selected one or more fluid materials disposed in the fluid container; a pump for controllably pumping a selected volume of the expresser fluid into and out of the expandable enclosure wherein the fluid container is receivable within the centrifuge chamber and a retaining mechanism for holding the fluid container within the centrifuge chamber in a coaxial position wherein the flexible wall of the fluid container is in contact with the flexible wall of the expandable enclosure.

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